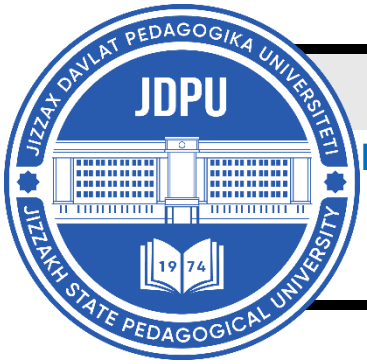
DOI: https://doi.org/10.37547/mesmj-V6-I1-20 Pages: 160-163

MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL




MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL

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# METHODOLOGY FOR OPTIMIZING TRAINING LOADS FOR PARA-CYCLING ATHLETES

***J. Jumaniyozov***
*Independent researcher*
*Uzbek State University of Physical education and Sports*
*Chirchik, Uzbekistan*

**ABOUT ARTICLE**

**Key words:** Optimization, planning methodology, physical training, complex of special exercises, functional training, improvement, tools, tasks, competition, training process.

**Received:** 21.01.25
**Accepted:** 23.01.25
**Published:** 25.01.25

**Abstract:** This article presents information on the development of a methodology for optimizing training loads for paraveline athletes, the use of instrumental methods aimed at planning and standardizing workloads on weekdays, as well as the methodology for planning physical classes.

**The relevance of the research.** Currently, insufficient study of problems related to the optimal distribution of training and competitive loads in the annual training cycle of paraveline athletes in the world requires the use of training load methods at different stages of this direction. The distribution of various exercises, as well as the optimal amplitude of the volume and parameters of loads, in accordance with the combined training of paravelot athletes during the preparatory, competitive, and transitional periods, is of particular interest. Due to the insufficient study of changes in the methodology of training loads for paraveline athletes at the initial stage of specialization, a more detailed review remains one of the pressing tasks.

**The object of the** study is the training process of paravelymen specializing in adaptive physical culture and sports at the Uzbek State University of Physical Culture and Sports.

**The subject of the** study is the structure and content of paraveline athletes' training.

**The purpose of the research** It consists of developing proposals and recommendations for the methodology of optimizing training loads for paravelyners.

**Research objectives:** Development of training load standards for paravelan athletes;

Development of a weekly training cycle for paravelan athletes during training.

**The results of the research and their discussion.** Depending on the tasks assigned to the para-cyclist, depending on the period of training, various options can be implemented. Therefore, this exercise can be done sequentially or in approaches. Classes are conducted on a long break between approaches, according to the approach. There are two types of training: recovery and development. As a rule, accelerations from 5 to 10 are performed in recovery sessions, and 10-20 in developmental sessions. For highly skilled athletes, i.e., specialists engaged in paravelosport and having a higher level of sports than a master of sports, the volume of training does not increase, but rather decreases, as para-athletes are much more intensely engaged than amateurs or beginners.

The volume of training also depends on the specialty in which a particular para-athlete is located. If a para-athlete is a sprinter, he performs explosive acceleration at short distances, then the training volume will be smaller. If the tempo is specialized in medium or long distances, then the altitude may be high.

The number of weekly training sessions depends on the athlete's functional condition, the competition calendar, and the microcycle the paracyclist is currently conducting. If the microcycle is aimed at increasing aerobic capacity, then in the developmental mode, such training should be conducted two to three times a week. If there is a tonic microcycle, then you can exercise in tonic mode every day.

Sports outcomes and the level of sportsmanship largely depend on how effectively physical qualities are developed in childhood, adolescence, and youth.

Motivation is a very important parameter in the training of any para-athlete, and it should be maintained at a high level throughout the year. As a rule, in the spring, para-cyclists go to training camps, which is a great motivational aid, as after training, para-cyclists are usually stronger, faster, and more enduring. But to go to the meeting, it is necessary to prepare for it and have the appropriate physical form.

A training program such as "Tababat Training to Enhance Aerobic Abilities," such as Tabata, is a useful tool in combating the problem of overweight, preventing negative consequences (in terms of weight loss and body fat) among low-weight individuals, and preventing unwanted normal weight loss.

Physical abilities develop naturally, but are realized when students transition from one category to another. This development is called age-related changes. Physical education in childhood and adolescence should primarily be aimed at the comprehensive development of tools.

During the training period, it is necessary to develop a training plan for a paracyclist, which includes various strength exercises using modern technologies, as well as exercises for stretching muscles used during work at the end of each training session. If you don't stretch the muscles, especially the biceps of the thigh, after each workout, it will cause it to shrink, that is, shrink, and also cause pain, worsening results, and a decrease in strength.

In the initial stages of training for para-cyclists, it is better to start with general strength endurance, and once this level is reached, it is necessary to continue developing maximum strength using fitness technologies, which in turn opens up new frontiers for work. Overall strength endurance should not be excluded from the training program, but it can change its form, and various fitness technologies contribute to the diversity of the training process, which contributes to the improvement of the overall physical fitness of paracyclists. Fitness level is limited by factors such as age and genetics, but regular and balanced exercise significantly improves a cyclist's health and quality of life.

The methodology for optimizing training loads for para-cyclists can be implemented in the following stages. This methodology ensures a gradual increase in workloads, taking into account rest time, and taking into account the physical capabilities of athletes. For this purpose, the methodology is presented in the form of the following table.

**Table 1**

**Methodology for optimizing training loads for para-cycling athletes**

| Stage | Type of training | Load level | Training duration | Time to rest | Explain |
|---|---|---|---|---|---|
| 1. Preparation | Low-intensity cardio (cycling on smooth road) | 50-60% max strength | 20-30 minutes | 1-2 day | This is done to determine the athlete's functional capabilities and ensure adaptation to the musculoskeletal system. |
| 2. Strengthening | Moderate intensity exercises (medium incline pedal rotation) | 60-70% max strength | 30-40 minutes | 1-2 day | At this stage, loads are introduced aimed at increasing muscle endurance. |
| 3. Maximum loads | High intensity intervals (altitude and speed exercises) | 70-90% max strength | 40-50 minutes | 2-3 day | It is used to test the athlete's maximum capabilities and prepare them for competitions. |
| 4. Restoration | Low-intensity cardio (light pedal rotation, no slope) | 30-50% max strength | 15-20 minutes | 1-2 day | This stage is important for accelerating muscle recovery and preventing injuries. |
| 5. Analysis | Evaluating the athlete's own results and developing a training plan for the future | - | - | - | At the end of each cycle, the athlete's condition is analyzed and the loads are adjusted to suit their individual needs. |

Training should be adapted according to the classification of para-cycling athletes (degree of injury). For example, bicycle trainees are adapted for athletes who use more manual strength. During training, heart rate (HR), blood pressure, and other indicators should be monitored. Loads are constantly optimized depending on the athlete's capabilities. It is important to allocate a sufficient amount of time between classes for rest and recovery.

The developed program helped the subjects in the experimental group to improve their athletic performance in paravelosport, increase their physical fitness, improve and accelerate the recovery of working muscles during training, and overall, the emotional state of the para-cyclists in the experimental group significantly improved.

In conclusion, it should be noted that by applying the training program and competitive activities of paravelymaths, special physical fitness of paravelymaths was improved by an average of 15.2%.

**List of used literature:**

1. Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасида жисмоний тарбия ва спортни янада такомиллаштириш ва оммалаштириш чора-тадбирлари тўғрисида” ги ПФ-5924-сон Фармони 2020- йил 24-январ.

2. Ўзбекистон Республикаси Президентининг “Паралимпия ҳаракатини ривожлантириш”га доир қўшимча чора-тадбирлари тўғрисидаги ПҚ-5114-сон қарори 2021 йил 18 май.

3. Маткаримов Р.М, Юнусов С.А, Ходжаев А.З. Технология применения дополнительных упражнений на этапе становления спортивного мастерства. Педагогик таълим (илмий-назарий ва услубият журнал), -№2. – Тошкент, 2003. - С. 51-53.

4. Ходжамкелдиев, Г. Спорт машғулотлари жараёнларида тикланишнинг аҳамияти // *Ижтимоий-гуманитар фанларнинг долзарб муаммолари/Актуальные проблемы социально-гуманитарных наук/Actual Problems of Humanities and Social Sciences.*, *3*(7), (2023). 233-237.

5. Khojamkeldiyev, G. S. Medical and biological means of increasing working capacity and recovery of athletes // *Mental Enlightenment Scientific-Methodological Journal*, Jizzakh, 2023. - P.232-237.

6. Khujamkeldiyev, G. S. (2023). The importance of recovery in the processes of sports exercises // In *Физическое воспитание и спорт в высших учебных заведениях: сб. статей XIX Междунар. науч. конф., Белгород, 25–26 апр. 2023 г./Белгор. гос. технол. ун-т.–Белгород: Изд-во БГТУ, 2023.–471с. ISBN 978-5-361-01170-4* (P. 462).

7. Ходжамкелдиев, Г. (2023). Спорт машғулотлари жараёнларида тикланишнинг аҳамияти // *Ижтимоий-гуманитар фанларнинг долзарб муаммолари/Актуальные проблемы социально-гуманитарных наук/Actual Problems of Humanities and Social Sciences.*, *3*(7), - С.233-237.